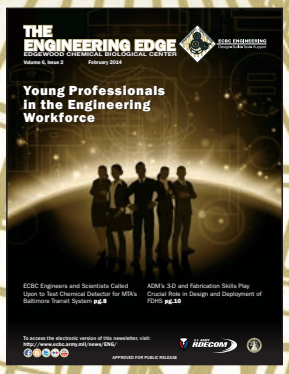
# THE ENGINEERING EDGE

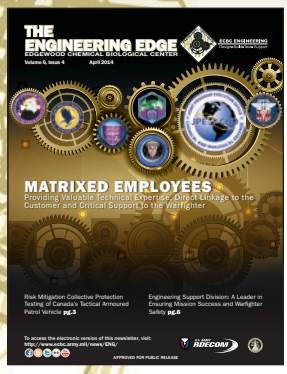
## EDGEWOOD CHEMICAL BIOLOGICAL CENTER

Volume 6, Issue 12 December 2014

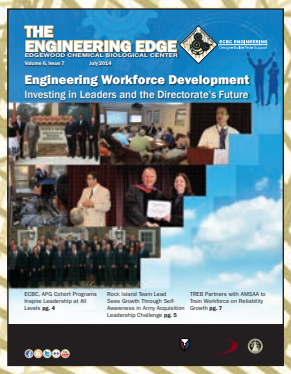
ECBC ENGINEERING
Design→Build→Test→Support

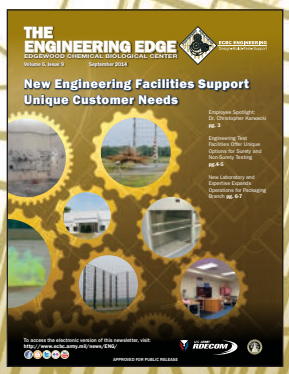


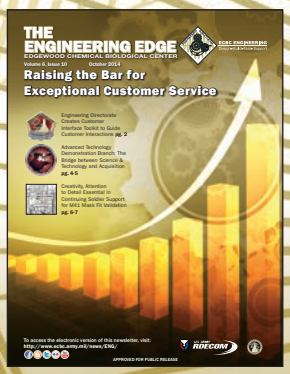


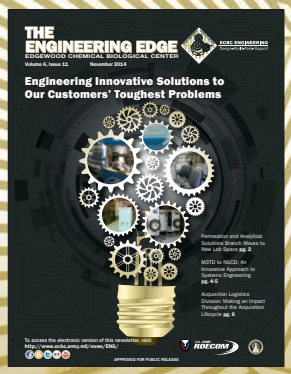







# Engineering Edge 2014 Year in Review

To access the electronic version of this newsletter, visit:
http://www.ecbc.army.mil/news/ENG/

U.S. ARMY RDECOM

APPROVED FOR PUBLIC RELEASE

# INSIDE THIS MONTH'S ISSUE:



**This newsletter was published through the Balanced Scorecard.**

For article suggestions, questions or comments please contact **Ed Bowen** at **edward.c.bowen8.civ@mail.mil.**

## Bugle Calls Return to Aberdeen Proving Ground

Following a five-year hiatus, bugle calls have returned to Aberdeen Proving Ground (APG) as part of the Army's long-standing tradition and culture. Bugle calls serve as official ceremonies to render honors to the American flag. The calls are a part of a normal procedure on Army installations in the U.S. and worldwide.

A bugle call is a short tune consisting of five musical notes. Historically, bugle calls were the primary method of communicating to Soldiers, signaling alerts to attack, retreat or rest for the day. From the Revolutionary War to World War II, bugle calls were one of the very few methods of battlefield communication.

As of Nov. 17, all APG personnel — including civilians — are required to render courtesies during bugle calls as outlined in Army Regulations 600-25. These courtesies include stopping to face the American flag, if it is in view. There are three American flags flown on APG: in front of RDECOM Headquarters and CECOM Headquarters on APG-North and at McBride Field on APG-South (Edgewood area). If a flag is not in view, individuals should stop and face the direction of the music.

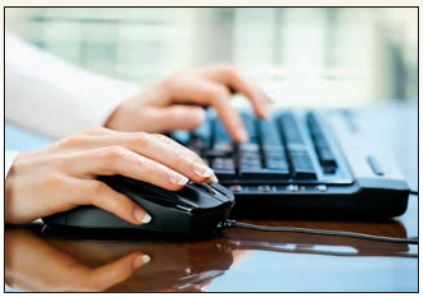
"Reveille" will be played every day at 6 a.m. and is approximately 30 seconds long. Traditionally, it serves as a signal to troops to awaken for morning roll call. It is used to accompany the raising of the American flag.

"Retreat" will be played every day at 5 p.m., signaling the end of the official day. "Retreat" will be directly followed by "To the Color," which renders honors to the nation and commands all the same courtesies as the national anthem. Together, the two calls are approximately one-minute long and are used to accompany the lowering of the American flag. "Taps" will be the last bugle call of the day at 10 p.m., signaling lights-out.

For vehicles already driving on post during bugle calls, APG's policy requires all drivers to come to a complete stop and put the vehicle in park. Military personnel are expected to exit their vehicle and render honors; however, civilians are to remain in their vehicle, but to stay quiet and respectful.

Military flag details will raise the flag at APG's CECOM Headquarters and at McBride Field during "Reveille," and will lower the flag during "Retreat" and "To the Color." The flag will remain raised on weekends, federal holidays and military-training holidays.

## **Windows Tip:** How to Print a Screenshot



The Print Screen function is a fast, efficient and simple way to print content from your computer screen. However, if you are using multiple computer monitors, taking a screenshot of a specific window is not as simple. Instead of sending multiple screenshots directly to the printer, the Print Screen key allows you to take a screenshot of the window you want and copy it directly into the Clipboard. To take a screenshot, hold the "Alt" key and "Print Screen" key together. It sends the current window — not the entire screen — to the Clipboard. Next, paste your screenshot into your favorite image viewer like Microsoft Office Picture Manager or Adobe Photoshop, or a document viewer like Microsoft Word. You can now print your screenshot. Note: This tip works in multiple versions of Windows.

# BD Semi-Annual Review Highlights Progress and Next Steps

The second Engineering Directorate Business Development (BD) Semi-Annual Review, held on Nov. 5, emphasized the progress of the Directorate's BD initiative to build fidelity in the newly integrated BD process and transition this initiative into a sustainment phase during the third quarter of FY15.

Associate Director Ron Pojunas opened the meeting by reiterating the importance of the BD strategic initiative and emphasizing the Engineering Directorate's support of this effort. "In a changing environment, business development is more important now than ever," said Pojunas. "We are asking the workforce to lean forward and support this effort as we stand up the BD plan and integrate it into our daily operations."

The meeting began by showing a timeline of the BD initiative implementation plan. This timeline highlighted 2014 as the pilot year of the BD initiative, with the initiative transitioning to a sustainment phase in spring 2015 once the BD process and tools that support it are firmly rooted within the Directorate. During this time period, the BD training and BD core team meetings will continue; however, the BD core team meetings will be conducted by a BD sustainment team to be formed in early summer 2015.

Engineering Directorate leadership has approved the BD plan for FY15. Key to this plan is the newly integrated BD process, which links the Pipeline Tool 2.0 to the Business Management Tool (BMT) 2.0 to streamline project reporting and empowers the workforce to populate the tool with BD opportunities. Important plan components were previewed during the meeting, including the interrelationship of the Directorate's six strategic objectives and the introduction of BD metrics to evaluate BD performance.

Next, a snapshot of data captured in the Pipeline Tool 2.0 and BMT 2.0 was provided. Progress with the recent data call and the information it captured was noted; however, there is still need for improvement to correct issues. In addition, version 3.0 for both the BMT and BD Pipeline tools will be launched prior to the next data call in March 2015. "The Pipeline tool and the BMT tool have been cemented, and will help us manage our business data," said BD strategic initiative lead Humberto Galarraga. "Your continued participation and diligence will help build fidelity in the tools and in the BD process, with the ultimate goal of better BD planning for the Directorate moving forward."

Galarraga then presented his division's Division Status Report (DSR), which captures information in four categories: business development, business management, human capital and collaboration. The purpose of the DSR is to provide a view of the overall health of each Division, and how it is meeting mission needs with its personnel, project funding and collaborative efforts. Division chiefs will be expected to brief their own DSR at the next semi-annual review tentatively scheduled for April 2015.

The session continued with four divisions briefing their business objectives for FY15 to encourage transparency and collaboration. The Detection and Decontamination Engineering Division, Engineering Support Division, Engineering Test Division and Sustainment Support Division briefed at this review; the other Divisions will be given the opportunity to brief at the next semi-annual review.

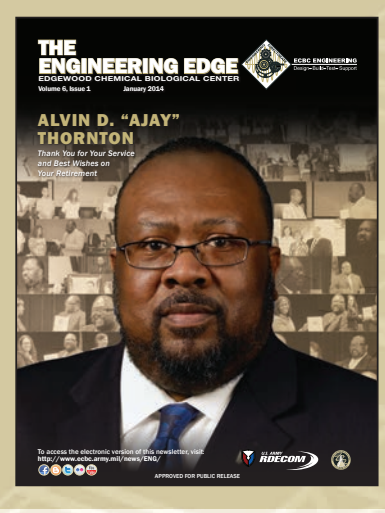
# Ask a Tech Tip: Keeping Your Christmas Tree Fresh

***Mike Kauzlarich**, of the Pyrotechnics and Explosives Branch, reveals how the techniques and lessons learned in labs can help you solve your household problems. Submit a question to him at **usarmy.APG.ecbc.mbx.engineering-directorate@mail.mil.***

Many people enjoy the look, smell and nostalgia of a live Christmas tree — but the freshness of the tree can quickly fade away. Some fans of a live tree think introducing additives like aspirin, vodka and sugar into the water are necessary. However, this is not true and will actually cause your tree to lose its freshness much faster.

Here are some tips for keeping your Christmas tree fresh: When you find a tree that you like, do a freshness test to make sure it is worthy enough to come home with you. Gently grasp a branch between your thumb and forefinger and pull it toward you. If the tree is fresh, very few needles should come off in your hand. After you have chosen your tree, make sure to cut off one-half inch of the stump before placing it in a tree stand. If you don't cut off some of the trunk, the tree won't be able to absorb water properly, and the tree will eventually dry out and become a fire hazard. Use plain, fresh water to keep the tree hydrated, and water it daily. An eight-foot tree can "drink" up to a gallon of water per day!.

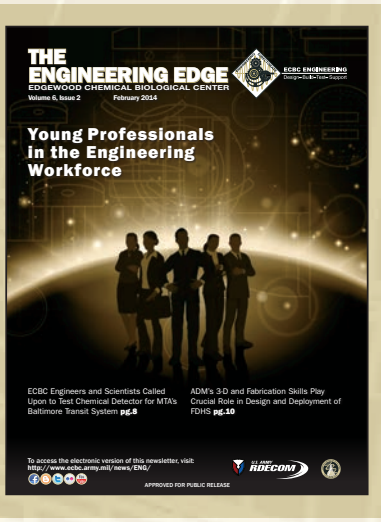
# **Engineering Edge** 2014 Year in Review




## January 2014
Volume 6, Issue 1

### Alvin D. "AJay" Thornton: Saluting the Directorate's Chief for Leadership and Service to the Nation

The Engineering Edge bids a fond farewell and best wishes to Mr. AJay Thornton as he retires this month from more than 30 years of government service.




## February 2014
Volume 6, Issue 2

### Young Professionals in the Engineering Workforce

Some of the Directorate's young professionals (age 30 and under) share what attracted them to working at ECBC, what they like most about working here, and what they think the Center can do to retain young talent.

### Putting Their Heads Together: ADM Collaborates with R&T Directorate on Wireless Testing Capability

Collaboration between the Engineering Directorate's Advanced Design and Manufacturing (ADM) Division and the Research & Technology Directorate's (R&T) Respiratory Protection Branch has resulted in the development of a wireless capability for the PortaCount mask fit tester for chemical, biological, radioactive and nuclear (CBRN) respiratory protection systems. The capability allows for data collection and analysis in real time and at a lower cost.

### Congratulations to Eugene Vickers for Patriotic Employer Award for Support of the National Guard and Reserve

ECBC Engineering Directorate congratulates Eugene Vickers, Chief, Engineering Test Division, for being awarded the Patriotic Employer designation by the National Committee for Employer Support of the Guard and Reserve.

### Employee Spotlight: Dick Hughes

Engineering Directorate Executive Officer; Lead Environmental Scientist, Directorate of Program Integration (DPI)

### Message from the Acting Director Bill Klein

"In this new role, my focus will change from looking inward at the Directorate to looking outward toward our customers, stakeholders and the Chemical Biological Defense Program leadership. That means working with our higher headquarters, customers and you to ensure we are a viable and critical asset to the Warfighter and the nation, now and for years to come."

### ECBC Engineers and Scientists Test Chemical Detector for MTA's Baltimore Transit System

On Dec. 11, 2013, representatives from Maryland Transit Administration (MTA) visited ECBC to observe test setup and operation of a chemical detector system. The system will be used for the detection of toxic industrial chemicals and chemical warfare agents in Baltimore's transit system. During this visit, members of the Engineering Directorate's Detection Engineering Branch provided an overview of the test setup, detector operations, confidence check procedures and the results of testing to date.


### ADM's 3-D and Fabrication Skills Play Crucial Role in Design and Deployment of FDHS

During the design phase of the Field Deployable Hydrolysis System (FDHS), the ADM Division showcased its unique rapid prototyping capabilities to fabricate custom components, including models of the skid layout and ancillary equipment. ADM took the final design specifications to produce a three-dimensional (3-D) model which was used to produce the blueprints for the final product. When the blueprints were finalized, ADM used a combination of commercial off-the shelf technology and custom fabricated components to build three FDHS systems.

Design Build Test Support


## March 2014
Volume 6, Issue 3

### Women in Science and Engineering

For three consecutive years, ECBC has received the Federal Women's Program award for providing women with leadership opportunities and for implementing programs that give women guidance on career development and long-term training. Women play valuable roles in the Engineering Directorate, serving as scientists, engineers, advisors and leaders. Here, three women share their experience and offer advice for young women starting their careers in science and engineering.

*Continued From February 2014*

### A Fond Farewell: ECBC Toasts AJay Thornton at Retirement Luncheon

ECBC bid a fond farewell and best wishes to Engineering Director Alvin D. "AJay" Thornton at a retirement luncheon held in his honor on Jan. 27 at the Richlin Ballroom.

### Congratulations to Recipients of Silver Quill Award

Three members of the Engineering Directorate, Dr. John R. Kennedy, Cynthia Learn, and Mary (Trish) Weiss, received the Silver Quill Award for an article titled "No Warfighter Left Behind" that was published in the winter 2013 edition of Army Chemical Review.

### Employee Spotlight: Christine Pan

Systems Engineer, Obscuration and Nonlethal Engineering Branch

### ATD Engineers Evaluate Warfighter Feedback to Improve RASR Detection System Technology

Engineers from the Advanced Technology Demonstration (ATD) Branch are helping train Warfighters to use state-of-the-art robotics and sensors to detect dangerous chemical agents in the field. The branch serves as the Technical Manager of the program, called the Rapid Area Sensitive-Site Reconnaissance (RASR) ATD, and is currently responsible for managing and executing the Extended User Evaluation phase. That includes listening to and evaluating feedback straight from the users – Army Soldiers and Marines.

### Sustainment Engineering Division: People, Capabilities, Customers and Service to the Warfighter

The Engineering Directorate's Sustainment Engineering Division (SED) plays a key role in the acquisition of sustainment spares and Class II end items. These activities help keep our Warfighters' legacy equipment functioning and the stock replenished with key expendable items, such as the M295 decontamination kit.

### Employee Spotlight: COL Debra Daniels

ECBC Military Deputy and Army Soldier

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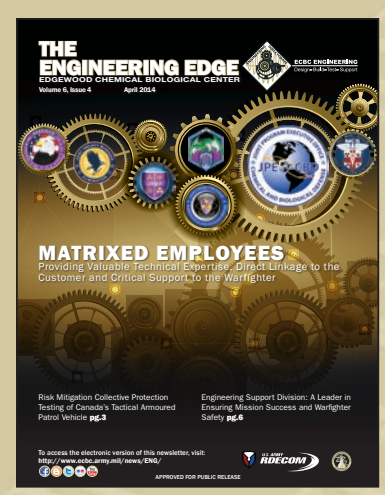
# Engineering Edge 2014 Year in Review




## April 2014

Volume 6, Issue 4

### Matrixed Employees Provide Valuable Technical Expertise, Direct Linkage to the Customer and Critical Support to the Warfighter

Matrixed employees make up approximately one-third of the Engineering Directorate's workforce, and play a valuable role as subject matter experts and liaisons to the Joint Program Executive Office for Chemical and Biological Defense (JPEO-CBD) and its Project Managers (PMs). Their skills and experience in engineering, science, technology, logistics and business are an asset to both the PMs and the Directorate.


## May 2014

Volume 6, Issue 5

### ADM Division's Artists and Model Makers Create High-End Animations and Visual Aids to Enhance Warfighter Training and Customer Programs

The Engineering Directorate workforce is known for its chemical, mechanical, design and test engineers, whose extensive training and experience have made them subject matter experts (SMEs) in the areas of detection, protection and obscuration. But did you know that the Directorate also has its own artists – a highly-skilled creative team that uses the latest technologies in graphic design, animation and modeling to create customized illustrations, interactive training aids and realistic models for Warfighter training and other customer programs.

### Risk Mitigation Collective Protection Testing of Canada's Tactical Armoured Patrol Vehicle

The United States military and its workforce pride themselves on protecting our country and our allies. A collaborative effort often proves most effective. Led by Aberdeen Test Center, the ECBC Test Reliability & Evaluation Branch (TREB) recently completed risk mitigation testing for a Canadian armoured patrol vehicle.

### Engineering Support Division: A Leader in Ensuring Mission Success and Warfighter Safety

The Obscuration and Nonlethal Engineering (ONE) Branch, and the Pyrotechnics and Explosives Branch partner frequently to improve existing or develop new technologies and materials, in the areas of energetic materials and smoke and obscurant payloads. Led by Bill Lake, the Division provides legacy and subject matter expertise and leverages its unique fabrication and testing capabilities to overcome production challenges, meet customer needs, and provide Warfighters with the safest, most advanced equipment possible.

### Engineers Serve as Scientists in the Classroom to Promote STEM Education

The Engineering Directorate workforce is often tapped to be scientists in the classroom, providing a science- or engineering-related lesson and demonstration for students. On Feb. 3, members of the Detection and Decontamination Division and Protection Engineering Division participated in a science, technology, engineering and mathematics (STEM) presentation and activity for the third grade classes at Abingdon Elementary School in Abingdon, Md.

### Employee Spotlight: Ryan Kostick

Program Analyst matrixed to the JPEO-CBD Bioserveillance Office

### ECBC Engineers Field M50 Mask to Army Soldiers Stationed in Japan and Korea

Efforts to meet the full operating capability requirement of the M50 mask continue this month as the ECBC Joint Service General Mask (JSGM) Team fields the mask to Soldiers stationed in Japan and Korea. On March 12, the team departed for a seven-week-long campaign to field masks at six different Army sites in the region. By the end of April, more than 39,000 masks had been successfully inspected, trained and fielded to the Soldiers in the region.

### 29th Combat Aviation Brigade Answers the Call of Duty from APG to Maryland, the U.S. and Beyond

The Maryland Army National Guard's 29th Combat Aviation Brigade (CAB), located at the Edward J. Wide Airfield on the Edgewood Area of Aberdeen Proving Ground (APG), is positioned and prepared to answer the call for service – whether that call comes from the Governor of Maryland or the President of the United States. On April 4–6, Solders from the Maryland National Guard 231st Chemical Company partnered with the 29th CAB to conduct a chemical reconnaissance and decontamination training exercise downrange on Edgewood.

### Employee Spotlight: Stephen Harper

Chief, Environmental and Field Testing Branch, and Black Hawk Helicopter Instructor Pilot

Design Build Test Support


## June 2014
Volume 6, Issue 6

### Powering Product Integration and Delivery: ECBC Matrixed Personnel Integrate and Deliver CBRN Dismounted Reconnaissance Sets, Kits and Outfits to Joint Forces

In the past decade, a number of quick-response capabilities have been fielded to the U.S. military branches to fulfill the need to conduct dismounted reconnaissance and site assessment for the full spectrum of CBRN hazards that Warfighters may encounter in the field. A need has emerged for a standard set of equipment that could be used across the Joint Services to assess potentially hazardous areas where traditional mounted CBRN equipment cannot reach.


## July 2014
Volume 6, Issue 7

### ECBC, APG Cohort Programs Inspire Leadership at All Levels

Teamwork. Decision-making. Networking. Collaboration. Partnership. These are just some of the skills that are reinforced in cohort programs designed to prepare Engineering Directorate staff for leadership positions. Here, Engineering employees who have graduated from or are currently involved in cohort programs talk about what they learned – both about leadership and about themselves – that has inspired them to be more effective leaders.

### Powering Innovation: JPM-Protection Working Toward Critical NIOSH Certification for M53 Mask

To ensure maximum usability of the M53 Mask, a multi-functional team in the JPEO-CBD Joint Project Manager Protection (JPM-P) is securing crucial certifications that will allow the equipment to be widely used in partnerships with Weapons of Mass Destruction-Civil Support Teams and other first responders.

### Powering the Warfighter: New JPM-Elimination (P) Transitioning Chemical Agent Disposal Expertise to Projects for Warfighter Use

The newly formed Joint Project Manager for Elimination (Provisional) (JPM-E (P)) is transitioning its extensive knowledge and expertise in domestic chemical stockpile elimination into a new space – many of its projects are now intended for U.S. military use so that Warfighters will have the capability to safely destroy Weapons of Mass Destruction (WMD) materiel in the field, anywhere in the world.

### Leadership Profile: Randy Laye

In addition to serving as Deputy Director of the Engineering Directorate, Randy Laye is the senior client manager for the JPEO-CBD and its subordinate JPMs.

### Two Engineering Employees Selected as Finalists for ECBC Excellence in Safety Award

The Engineering Directorate congratulates Mike Kauzlarich and John Stortstrom from the Engineering Support Division who were selected as finalists for this year's ECBC Excellence in Safety Award.

### Rock Island Team Lead Sees Growth through Self-Awareness in Army Acquisition Leadership Challenge

Eric M. Slattery, Solution Architect and Development Team Lead in the Engineering Directorate's Information & Technology Solutions Branch, fits the "norm" for science and engineering professions. Thanks to his experience in the Army Acquisition Leadership Challenge, Slattery is now making a conscious effort to work outside of inherent behaviors and establishing stronger bonds with coworkers, an essential aspect of leadership.

### TREB Partners with AMSAA to Train Workforce on Reliability Growth

To increase its proficiency in reliability growth, TREB has partnered with the Army Materiel Systems Analysis Activity (AMSAA). Training keeps TREB up to date in the field and also establishes new contacts that may foster new work or collaborative efforts between the teams.

### Innovative Engineering Projects Moving Toward Tangible Technologies

The National Defense Authorization Act allocates specific funds for the purpose of technology development, supporting the transition of technology developed in laboratories, workforce development and minor construction for enhancement of laboratory capabilities. Known as Section 219 Funding, this source has backed several projects within the Engineering Directorate that are progressing since proposals were accepted in March 2013.

### Employee Spotlight: Angel F. Cruz

Mechanical Engineer in the ADM Division currently deployed in Afghanistan as the RDECOM Liaison Officer to the 401st Army Field Support Brigade

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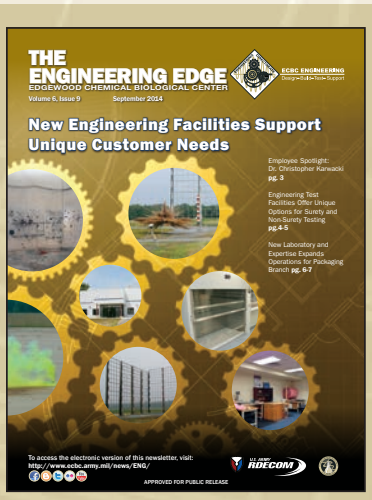
# Engineering Edge 2014 Year in Review


## August 2014

Volume 6, Issue 8

### ECBC Mentoring Program Creates Networks and Awareness Inside and Beyond Engineering Directorate

Employee education and growth are essential to the core ability of the Engineering Directorate and ECBC as a whole to provide innovative, cutting-edge solutions to customers and Warfighters. This continuing need for training has resulted in numerous employee-focused initiatives centered on mentoring and STEM education.




## September 2014

Volume 6, Issue 9

### Engineering Test Facilities Offer Unique Options for Surety and Non-Surety Testing

Recent upgrades to two ECBC Engineering Directorate test facilities have added tremendous capability to its roster of state-of-the-art facilities located on the Edgewood area of APG. Now the Directorate is even more equipped to handle the CBRNE defense testing requirements of the U.S. military and other customers.

### STEM Outreach Shows Returns Now and On the Horizon

Similar to the mentoring program in both purpose and performance are ECBC's outreach programs to build awareness and education in the STEM disciplines, crucial areas of focus for future employees working in the chemical, biological, radiological, nuclear and explosives (CBRNE) defense space. ECBC has been actively promoting STEM education in nearby Harford and Cecil County schools since the 1980s, said ECBC Public Affairs Office Nicole McKew, who coordinates the Center's STEM outreach programs.

### OSCAR Provides Online Ordering for the Critical Reagents Program

The Information & Technology Solutions Branch (ITSB) in the Engineering Directorate at Rock Island, Ill., recently launched an online ordering system in support of the Critical Reagents Program (CRP) within the JPEO-CBD. As a principal resource for the biological defense community, the CRP provides high-quality, validated and standardized biological detection assays and reagents for use by customers from DoD components and federal agencies.

### Engineering Directorate Employees Honored for their Service to the U.S. and the Warfighter

The accomplishments of several Engineering Directorate employees were honored at the ECBC Town Hall on Wednesday, July 30. Awards were presented by Director Joseph D. Wienand.

### Employee Spotlight: Shelby Bartram

Science, Mathematics and Research for Transformation (SMART) Intern with the Protection Factor Test Team

### New Laboratory and Expertise Expands Operations for Packaging Branch

By capitalizing on the utility of its new laboratory, the ECBC Engineering Directorate's Packaging Branch is fulfilling its role as the go-to source in customized packaging and handling support for internal and external customers.

The 1,200-square-foot packaging laboratory opened in December 2013, allowing the Branch to combine capabilities in one location, streamline prototyping and packaging operations, and expand expertise in HAZMAT and other specialized capabilities.

### ADM Summer Picnic and Technology Challenge: Food, Fun and Friendly Competition

When the ECBC Engineering Directorate's ADM Division gathered at Flying Point Park on Aug. 7 for their annual summer picnic, it was not just to enjoy steamed crabs, pit beef, and conversation with colleagues and their families – it was also to partake in a friendly competition called the Technology Challenge.

### Employee Spotlight: Dr. Christopher Karwacki

ECBC Chief Scientist for the Physical and Chemical Sciences

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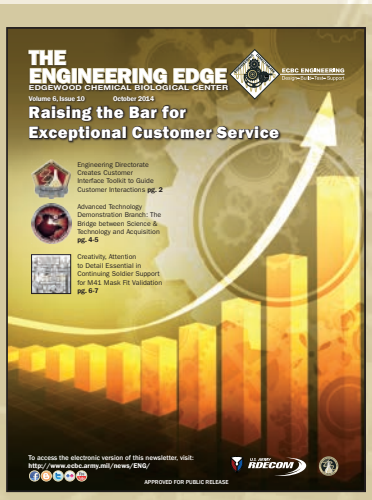
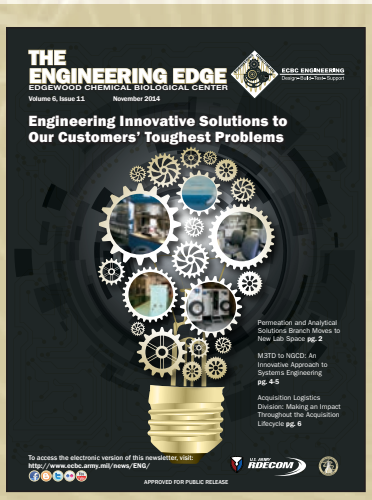



## October 2014
Volume 6, Issue 10

### Advanced Technology Demonstration Branch: The Bridge between Science & Technology and Acquisition

New technologies emerge from science and technology investments, industry and other sources. Sometimes these technologies offer new capabilities that have strong potential to benefit our Warfighters; but oftentimes the technology may not be mature enough for transition or operational use. In many cases, requirements for the new technology do not exist, or are being drafted. That is where the Engineering Directorate's ATD Branch can help – to demonstrate the viability of new technology in reconnaissance, detection and decontamination for the protection of the Warfighter against CBRN threats.




## November 2014
Volume 6, Issue 11

### M3TD to NGCD: An Innovative Approach to Systems Engineering

What began as a "market survey on steroids" is now informing the test plans and acquisition process for the Next Generation Chemical Detector (NGCD). A team from the Joint Project Manager for Nuclear, Biological and Chemical Contamination Avoidance (JPM-NBC CA) are combining lessons learned from that extensive market assessment with systems engineering methodologies to result in an innovative approach to the acquisition process – and ultimately a new family of chemical agent detectors for the Joint Warfighter.


### Creativity, Attention to Detail Essential in Continuing Soldier Support for M41 Mask Fit Validation

For Soldiers in theater using any of various protective masks to guard against respiratory threats from unsafe conditions or CBRNE agents, ensuring a perfect fit is essential. The slightest disparity in the equipment's conformation to a Soldier's face can cause a critical leak that may put their life in danger. Thankfully, the ECBC Engineering Directorate played a crucial role in developing the M41 Protection Assessment Test System (PATS) and continues to provide support and guidance to Soldiers in real time.

### ECBC Volunteers Honored for Eliminating Syrian Chemical Weapons

On Oct. 8, 45 U.S. Army civilian employees were proudly recognized for voluntarily deploying to the Mediterranean Sea to destroy Syria's declared chemical weapons stockpile. The ceremony was attended by nearly 500 colleagues, friends and family members.

### Employee Spotlight: Jennifer Iskra

Systems Engineer matrixed to the JPM-NBC CA

### Message from the Acting Director Randy Laye

"The accomplishments of our Directorate this year are notable, and would not have been possible without the unique technical expertise, collaboration with our partners, and excellence in customer service you demonstrated on each project."

### Permeation and Analytical Solutions Branch Moves to New Lab Space

The Permeation and Analytical Solutions Branch (PASB) in the Engineering Test Division has moved to a more modern surety laboratory as part of the Directorate's smart-growth infrastructure plan to modernize its facilities to align with the Directorate's emerging needs.

### Acquisition Logistics Division: Making an Impact Throughout the Acquisition Lifecycle

Acquisition logistics experts can advise customers if their system is designed and optimized for supportability. The Engineering Directorate's resident experts in this type of customer support are the members of the Acquisition Logistics Division (ALD) – qualified personnel who assist project team leaders in acquiring and producing high-quality logistics planning and products, from concept to engineering development, to production and fielding.

### Jordanian Armed Forces to Receive Mobile CBRNE Protection Laboratory from JPM-Guardian Engineering's ADM Division Provides Fabrication and Integration Expertise for this Milestone Capability

JPM-Guardian has fielded dozens of mobile laboratories to the U.S. National Guard and other civilian response organizations for on-site detection and identification of hazardous chemical and biological agents. For the first time, the JPM is fielding this capability to a U.S.-allied nation to provide increased protection of the country's borders.

### ECBC Engineering and JPM-NBC CA Support Navy's Innovative Missile Defense System

The Engineering Directorate's ONE Branch and the JPM-NBC CA have partnered to support a high-tech obscurant capability as part of the Navy's innovative missile defense system. The exercise brought together civilian experts and Warfighters from the U.S. Army, Navy and Air Force.

# Engineering Strategy Powers the Directorate's Progress in 2014


## January 2014

– **Engineering Directorate Lays Groundwork for Implementation of New Annual Business Development Plan**

To help minimize the financial impact of implementation, the Directorate has adopted a viral business development (BD) process and marketing campaign where "business development is everyone's business."

## February 2014

– **Division Chief Roundtable Leads Engineering Strategy into 2014**

At the first Engineering Directorate Division Chief Roundtable of the year, Mark Schlein, Chief of ADM, provided the main presentation on Real Time Project Manager (RPM).

– **Training Sessions Provide "BD 101" Preparation for Engineering Personnel**

The Engineering Directorate's BD training kicked off on Jan. 30. Within the next year-and-a-half, all of the Directorate's personnel will have completed the training.

## March 2014

– **First Division and Branch Chief Offsite of 2014 Takes an In-Depth Look at ECBC Engineering**

Acting Director Bill Klein presented the evolution of ECBC and how it fits into the Army and the joint chemical biological defense (CBD) community, as well as an insider's view of the CBD Program Objective Memorandum (POM) process.

## April 2014

– **Engineering Division Chiefs Continue Search for Best Program Management Tool**

Dan Davis, ECBC Research and Technology (R&T) Directorate Business Manager, presented an overview of R&T's Portfolio Management Database. The presentation was followed by a "State of the Directorate" briefing and updates on the BD plan and BD training sessions.

## May 2014

– **Engineering Directorate Launches Business Management Tool**

As part of the implementation of the Engineering BD Plan, a new Business Management Tool (BMT) is being piloted. Over the next year, the Directorate's BD initiative core team will work to integrate the tool and data collection efforts with the Directorate's existing business processes.

## June 2014

– **Semi-Annual Review Recaps the Pilot Effort FY14 BD Plan and Business Management Tool**

The first semi-annual review of the new BD plan and process was held on May 15. It included an update on the piloted FY14 BD plan and new BMT.

## July 2014

– **Engineering Workforce Shares Significant Progress on Strategic Initiatives at 14th SMM**

As a strategy-focused organization, the Engineering Directorate uses the Strategic Management Meeting (SMM) to keep the workforce involved in the direction of six major initiatives that support the Directorate's vision, mission and core competencies. All of the initiatives have progressed significantly since the last SMM in October 2013, and the initiative teams were praised for the hard work and energy they have put forth to tackle these challenging topics.

## August 2014

– **ECBC Seal of Excellence Program Featured at July Division Chief Roundtable**

A briefing on the ECBC Seal of Excellence is among the highlights of the Engineering Directorate Division Chief Roundtable held on July 15.

– **What to Expect from the BD Training Sessions: Tips from the Trainers**

The BD training covers the methods of pursuing business opportunities, preparation for business meetings, customer service skills and how to approach new business prospects.

## September 2014

– **Business Management Tool Upgrade Streamlines Engineering's Business Development Efforts**

The BD core team is launching an upgraded version of the online tool that facilitates and streamlines the strategic business and resource planning for the Directorate's future.

## October 2014

– **Engineering Directorate Creates Customer Interface Toolkit to Guide Customer Interactions**

There is more emphasis than ever on customer satisfaction and retention. As part of its Balanced Scorecard Strategy, the Directorate is taking a strategic approach to strengthening interactions with its customers.

– **Engineering Directorate's Human Capital Initiative – Focusing on People, Our Future**

The Engineering Directorate has established the human capital initiative to help build a stronger workforce that would enable us to accomplish our missions in the face of future challenges.

## November 2014

– **Engineering Strategic Initiatives: Progress and Path Forward**

Several staff received Balanced Scorecard awards in recognition of the effort and enthusiasm they have brought to the progress of the initiatives in FY14. The majority of the SMM focused on status updates of each initiative, with each presentation reflecting on the progress made in the past year; noting the accomplishments; and charting a path forward into FY15.

# Employee Spotlight:

# Jadey Pareja

This month's Employee Spotlight is on Jadey Pareja, Engineering Directorate Executive Officer. Pareja has been working in the Engineering Directorate for nearly ten years as a chemist and team lead with the Protective Equipment Test Branch in the Engineering Test Division.

**How did you begin your career at ECBC?**

I began my career at ECBC in 2005, when I was hired as a laboratory quality-control coordinator for the Protective Equipment Test Branch. Prior to coming to ECBC, I worked as a chemist for Battelle. As the laboratory quality-control coordinator, my role was to review technical data to ensure that technical specifications and parameters of the test were met. After learning the quality-control aspect, I worked my way into the lab to conduct testing; then became the Carbon Team Lead. This is a dual-hatted role, consisting of working in the lab, as well as scheduling, planning and coordinating with the customer. In the fall of 2013, I took over the Permeation Team Leader role as well.

**What made you decide to apply for the Executive Officer position?**

Although I enjoy working in the surety lab, the timing felt right for me to grow professionally and develop my leadership skills. Typically the Executive Officers are not assigned to their home Directorate, but this time the opportunity was in the Engineering Directorate, which intrigued me. I knew I would learn more about the Engineering leadership and their priorities, and how the Directorate operates.

**What are the major responsibilities of the position?**

The primary responsibilities are to compile and distribute the weekly Directorate highlights and manage the ECBC taskers for the Front Office. I find the weekly highlights to be very useful as a reference for points of contact in the Directorate, as well as for awareness of the current projects for each Division. Since my detail spans across FY14 and FY15, many year-end tasks need to be completed. I also support the Acting Director and Associate Directors on various assignments.

**How has this developmental assignment benefited your career?**

I'm in a unique situation in that I actually work for the Engineering Directorate and this experience has really helped me understand how the Divisions work together to carry out the mission of ECBC, as well as how the Directorate fits in the Center as a whole and supports our customers and higher headquarters. When the Front Office leadership says they have an open-door communication policy, it is true – They are very inclusive, supportive and encouraging, and I am appreciative of their advice.

**What have you learned as Executive Officer that you plan to take back to your job in the surety lab?**

It's been great to put faces to names! Oftentimes we conduct our work over email and teleconference, and don't get to meet in person. Recently, I had the chance to travel to Army TACOM and finally put faces to names and voices. Establishing these relationships can be critical when you need to reach out for assistance in the future. In this role I have also been exposed to the Directorate's strategic initiatives — particularly the Business Development and External Communications initiatives. I want to apply what I have learned from these initiatives to our Branch and make our team's capabilities more marketable.

**Do you have any advice for junior employees who are interested in advancing their careers?**

Step outside of your comfort zone and take advantage of all learning opportunities presented to you. Apply for cohort programs, volunteer for STEM activities, and participate in programs such as the strategic initiatives. The network and knowledge gained from these types of activities complement your technical skills and are extremely valuable to your career.

**Tell us more about yourself. What are your hobbies outside of work?**

My husband and I love to travel, especially to tropical locations! We have been to four of the Hawaiian Islands, Aruba, Cancun, Costa Rica, Dominican Republic, Puerto Rico and Turks & Caicos. Of course we like to relax on the beach, but also go on excursions and experience the culture. Aruba has been our favorite so far.

# Engineering Directorate Employees Recognized for Exceptional Service

The accomplishments of several employees were recognized at the Engineering Directorate Awards Ceremony on Tuesday, Nov. 4, in Berger Auditorium. Awards were presented by Acting Director Randy Laye.

- **Award for Next Generation Chemical Detector:** Dr. Roderick Fry, Edgar Gonzalez, Thomas Hughes, Jacob Lacey, Maegan Lay and Glenn Stanford
- **Army Materiel Command SES Note:** Elan Kazam
- **SES Note from Suzanne Milchling:** Dr. Roderick Fry
- **SES Notes from Joseph D. Wienand:** Juan Cajigas, Clare Dawson, Dexter Jennings, Michael Kauzlarich, John Kennedy and John Stortstrom
- **SES Notes from Dr. Joseph Corriveau for Field Deployable Hydrolysis System:** Ray Blucher, Dave Farnschlader and Randy Kuchta
- **SES Notes from Dr. Joseph Corriveau for Urgent Shipping:** Gary Hitch and Joseph Patterson
- **Patent Awards:** Joseph Domanico and Myatt Win
- **Memorandum of Appreciation:** Kevin Fritz
- **Commander's Award for Civilian Service:** Charles Steinert
- **RDECOM Coin and SES Note:** Courtney Van Johnson and Nicholas Merrill
- **Five Years of Government Service:** Angel Castro-Rodriguez, Dr. Roderick Fry, Justin Geldof, Olga Hartman, Joseph Maheady, Dominique McClain, Amanda Mihok, Ryan Muir, Christine Pan, Christopher Ruppert, Bradley Ruprecht, John Stortstrom and Kimberly Streaker
- **10 Years of Government Service:** Jamis Cann, Mark Colgan, Christopher Gilley, James Hendershot, Lester Hitch, Michael Holt, Erin Kennedy, Louise Leonguerrero, Colin McCloskey, Michael Palko, Jr. and David Whittaker
- **15 Years of Government Service:** Jerry Huen and Chika Nzelibe
- **20 Years of Government Service:** Douglas Celmer
- **30 Years of Government Service:** Marcia Johnson, Do Nguyen, Mary Peck, Holly Shisler and Inez Tyson

*Thank you to all of the award recipients for your exceptional service to ECBC, the United States and the Warfighter!*

## Jason Adamek, ADM Division, Earns Department of Army Award

A team of analysts comprised of personnel from ECBC and the Army Materials Systems Analysis Activity (AMSAA) produced the FDHS Risk Reduction and System Enhancement Study, which was used to inform the design, manufacturing and testing of the system. As a result of their exceptional efforts, they were awarded the **2014 Department of the Army Dr. Wilbur B. Payne Award for Excellence in Systems Analysis, Large Group Category**, in a ceremony held on Tuesday, Nov. 4. The award recognizes the best large- and small-group operations research analyses conducted in the previous year by Army analysis organizations. Jason Adamek, lead engineer from the Advanced Design and Manufacturing (ADM) division, was included in the honorees. Throughout the mission, ECBC and AMSAA captured the methodologies and processes used to make adjustments to clearly communicate key analytical findings to Army and DoD leadership. "This team's achievement is yet another example of the Army's science, technology, engineering and mathematical expertise collaborating to deliver solutions to national and international challenges and staying relevant in the current fight," said Ronald Pojunas, Engineering Associate Director.